

L66 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2003:166909 CAPLUS

DN 138:230436

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TI Coating solutions for preparation of ferroelectric thin-films,
manufacturing coating solutions thereof, and ferroelectric thin-films
prepared from solutions thereof

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PA JSR Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C01G035-00

ICS C01G035-00; C01G001-00; H01B003-12; H01L021-316

CC 76-8 (Electric Phenomena)

Section cross-reference(s): 57, 78

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------|------|----------|-----------------|--------------|
| PI / JP 2003063825 | A2 | 20030305 | JP 2001-256558 | 20010827 <-- |
| PRAI JP 2001-256558 | | 20010827 | | |

CLASS

| PATENT NO. | CLASS | PATENT FAMILY CLASSIFICATION CODES |
|---------------|-------|---|
| JP 2003063825 | ICM | C01G035-00 |
| | ICS | C01G035-00; C01G001-00; H01B003-12; H01L021-316 |

AB The title manufacturing of coating solns. involves reacting a metal alkoxide or carboxy chelate and an organic material, wherein the organic material includes carboxylic acids, alcs., ethers, ketones, and/or esters. The metal organic compound contains (a) Pb, Zr, Ti, and/or La or (b) Sr, Bi, Ti, Ta, and/or Nb. The coating solns. are low-temperature sinterable and provide storage stability and controlled quality by employing an organic metal compound and ordinary organic material.

ST metal alkoxide carboxy chelate soln sintering ferroelec film

IT Coating materials

Ferroelectricity

(coating solns. for preparation of ferroelec. thin-films and manufacturing coating solns. thereof and ferroelec. thin-films prepared from solns. thereof)

IT Metal alkoxides

RL: RCT (Reactant); RACT (Reactant or reagent)

(coating solns. for preparation of ferroelec. thin-films and manufacturing coating solns. thereof and ferroelec. thin-films prepared from solns. thereof)

IT Chelates

RL: RCT (Reactant); RACT (Reactant or reagent)

(metal carboxyl; coating solns. for preparation of ferroelec. thin-films and manufacturing coating solns. thereof and ferroelec. thin-films prepared from solns. thereof)

IT Materials

(organic; coating solns. for preparation of ferroelec. thin-films and manufacturing coating solns. thereof and ferroelec. thin-films prepared from solns. thereof)

IT Ferroelectric materials

(thin film, sintered coating solution; coating solns. for preparation of ferroelec. thin-films and manufacturing coating solns. thereof and ferroelec. thin-films prepared from solns. thereof)

IT 50-21-5, Lactic acid, reactions 149-57-5, 2-Ethylhexanoic acid

6074-84-6, Tantalum pentaethoxide 88863-33-6, Strontium di-isopropoxide
RL: RCT (Reactant); RACT (Reactant or reagent)
(coating solns. for preparation of ferroelec. thin-films and manufacturing coating

solns. thereof and ferroelec. thin-films prepared from solns. thereof)

IT 12060-59-2, Strontium titanate

RL: DEV (Device component use); PRP (Properties); USES (Uses)
(ferroelec. thin film; coating solns. for preparation of ferroelec. thin-films and manufacturing coating solns. thereof and ferroelec.

thin-films

prepared from solns. thereof)

RN 50-21-5
RN 149-57-5
RN 6074-84-6
RN 88863-33-6
RN 12060-59-2

L66 ANSWER 2 OF 3 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2003-321311 [31] WPIX

DNN N2003-256520 DNC C2003-084213

TI Coating liquid for ferroelectric substance thin film formation, comprises reaction material obtained by reacting organic metal compound, carboxylic acid, alcohol, ether, ketone and ester in absence of organic solvent.

DC E12 L03 U11 X12

PA (JAPS) JSR CORP

CYC 1

PI JP 2003063825 A 20030305 (200331)* 8 C01G035-00 <--

ADT JP 2003063825 A JP 2001-256558 20010827

PRAI JP 2001-256558 20010827

IC ICM C01G035-00

ICS C01G001-00; H01B003-12; H01L021-316

AB JP2003063825 A UPAB: 20030516

NOVELTY - The coating liquid comprises a reaction material obtained by reacting an organic metal compound, a carboxylic acid, an alcohol, an ether, a ketone and an ester in the absence of an organic solvent.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) manufacture of the coating liquid; and

(2) ferroelectric-substance thin film, which comprises the coating liquid.

USE - For ferroelectric substance thin film (claimed).

ADVANTAGE - The coating liquid has excellent storage stability and reproducibility. The ferroelectric substance thin film is obtained at low temperature baking, by using the coating liquid.

DESCRIPTION OF DRAWING(S) - The figure shows the sectional view of the ferroelectric substance element, which comprises the coating liquid. (Drawing includes non-English language text).

Dwg.1/7

FS CPI EPI

FA AB; GI; DCN

MC CPI: E10-C04; E10-E02D; E10-E02F1; E10-E02F2; E10-E04; E10-F02; E10-G02;
E10-H01D; E10-H01E; L04-C12

EPI: U11-C05A; X12-E01A

L66 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN

AN 2003-063825 JAPIO

TI COATING LIQUID FOR FORMING FERRODIELECTRIC THIN FILM, METHOD FOR MANUFACTURING THE SAME, AND FERRODIELECTRIC THIN FILM

IN SHINODA TOMOTAKA; IKEDA NORIHIKO; KOMATSU SATOSHI; YAMADA KINJI

PA JSR CORP

PI JP 2003063825 A 20030305 Heisei

AI JP 2001-256558 (JP2001256558 Heisei) 20010827

PRAI JP 2001-256558 20010827

SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 2003
IC ICM C01G035-00
ICS C01G001-00; H01B003-12; H01L021-316
AB PROBLEM TO BE SOLVED: To obtain a coating liquid capable of forming a ferroelectric thin film by sintering at low temperature having excellent storage stability and reproducibility containing effective components capable of dissolving in general-purpose organic solvents.
SOLUTION: This coating liquid is characterized by containing organic solvents and a reacted product which is obtained by reacting (A) organic metal compounds and (B) compounds selected from carboxylic acids, alcohols, ethers, ketones, and esters without organic solvents.
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